



## DIAREX H820E

High Impact Polystyrene Resin

Special Characteristics: H820E is high impact polystyrene for extrusion and thermoforming in E&E appliances with good Environmental Stress Cracking Resistant (ESCR) property.

Typical Applications: Refrigerator door, Cabinet liner and accessories

Typical Properties:

Properties	DIAREX H820E	Unit	Test Method
Physical Properties			
Melt Flow Rate (200 °C, 5 kg)	2.8	g/10 min	ASTM D1238
Density	1.04	g/cm <sup>3</sup>	ASTM D792
Vicat Softening Point	100	°C	ASTM D1525

Mechanical Properties			
Tensile Strength at Yield	3,600	lb/in <sup>2</sup>	ASTM D638
Tensile Elongation	50	%	ASTM D638
Flexural Strength	5,100	lb/in <sup>2</sup>	ASTM D790
Flexural Modulus (x10,000)	36	lb/in <sup>2</sup>	ASTM D790
Izod Impact Strength	2.0	ft.lb/in	ASTM D256
Rockwell Hardness	R112	Scale	ASTM D785
Underwriter Laboratory*	HB (1.5 mm)		UL-94

<sup>\*</sup>Data based on injection molding test pieces.

## Recommendation:

DIAREX H820E can be processed with recommended temperature between  $190-240\,^{\circ}\text{C}$  and melt temperature should not exceed  $260\,^{\circ}\text{C}$ . Note: Modifications of the processing conditions based on the variations of the product design and machine configuration.

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